Triton™ SWIR

Sony® SenSWIR™ IMX990 and IMX991 InGaAs Sensors

LUCID VISION LABS

SWIR

Model	Resolution		FPS	Sensor	Pixel Size	Shutter	Sensitivity Range	Lens Mount	GigE Interface
TRI003S-WC	**0.3 MP**	640 x 512 px	256 fps	Sony IMX991 CMOS	5.0 µm	Global	400 to 1700 nm	C-Mount	1GBASE-T, M12, PoE
TRI013S-WC	**1.3 MP**	1280 x 1024 px	84.9 fps	Sony IMX990 CMOS	5.0 µm	Global	400 to 1700 nm	C-Mount	1GBASE-T, M12, PoE

Interface, Power, and Size Information

Digital Interface	1000BASE-T, 100BASE-TX M12, PoE
GPIO Interface	8 pin M8 connector
Opto-isolated I/O ports	1 input, 1 output
Non-isolated I/O ports	2 bi-directional
Dimensions	44 x 29 x 45.3 mm
Lens Mount	C-Mount
Weight	90 g
Power Requirement	PoE (IEEE 802.3af), or 12-24 VDC external
Power Consumption	3.1W via PoE, 2.5W powered externally

Standard and Certifications

Standard	GigE Vision v2.0
Compliance	CE, FCC, RoHS, REACH, WEEE
IP Rating	IP67
Storage Temperature	-30 to 60ºC
Operating Temperature	-20 to 50ºC Case Temperature
Humidity	Operating: 20% ~ 80%, relative, non-condensing
Storage Humidity	20% ~ 95%, relative, non-condensing
Warranty	3 years

Imaging Properties

Image Buffer	128 MB
Image Processing	Gain, gamma, black level, white balance, LUT, pixel correction, hue, saturation
Pixel Formats	Mono8/10/12/16
Image Modes	Decimation, ROI, horizontal and vertical flip
ADC	8, 10, 12 bit
Gain Range	0 dB to 42 dB analog and digital
Exposure Time	30 µs to 10 s

Camera Features

Cooling Capability	None (User must manage camera temps)
User Sets	1 default and 2 custom
File system size	16 MB
Chunk Data	Timestamp, frame counter, offset X/Y, width/height, exposure time, gain, black level, line status, sequencer set
Event Data	Exposure start/end
Counter & Timer	2 counters and 2 timers
Sequencer	Exposure time, gain
Synchronization	Software trigger, hardware trigger, PTP (IEEE 1588)

*Not including lens barrel or interface ports

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C-Mount Model

4x M3 - 6H ⬇ 3.5 MIN

11.3

26

11.5

C-MOUNT

45.3

29

7.9

44

Visible Light + **SWIR**

Normalized QE

400 600 800 1000 1200 1400 1600 1800
Wavelength (nm)

STATUS LED

M8 GPIO CONNECTOR
M12 ETHERNET CONNECTOR

2x M3 - 6H ⬇ 4.5 MIN

26

3.3 39

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